



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,866	11/19/2001	Yoshitoshi Kurose	FUJO19.189	2344
26304 7590 11/16/2007 KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585			EXAMINER JOO, JOSHUA	
			ART UNIT 2154	PAPER NUMBER
			MAIL DATE 11/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/989,866

Applicant(s)

KUROSE ET AL.

Examiner

Joshua Joo

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Detailed Action

Response to Communication dated 09/05/2007

1. Claims 1-15 are presented for examination.

Response to Arguments

2. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection. New ground(s) of rejection are necessitated by Applicant's amendments. For the arguments regarding the rejection of claims that still apply to the instant Office action, Applicant argued that:

3. (1) Taylor fails to disclose obtaining information about a network service provided by the first device, responsive to the network service request, by communicating with said first device.

4. In response, Taylor teaches of obtaining information about a network service from a gateway (first device) (col. 5, lines 7-10. Accept messages from source such as gateway. col. 6, line 2-5. Determine protocol from messages. col. 5, lines 20-33; col. 8, line 67-col. 9, lines 10. List of potential protocols.). Examiner considers a protocol provided by the gateway as a network service, e.g. RSVP. Taylor further teaches that the gateway provides connection for a sending device (fig. 1; col. 9, lines 60-65), and it is well known in the art that a gateway is a network device that communicates and transfers messages for devices. Therefore, the communication from the gateway is in response to a network service request.

5. (2) Taylor fails to disclose a second device, which does not support a protocol of a network service request, being controlled and allowed to provide a network service corresponding to network service provided by a first device that responds to the request.

Art Unit: 2154

6. In response, Taylor teaches that a destination (second device), such as node in the Intranet, Internet or a device, utilizes different formats and protocols than the source (col. 3, lines 27-31), which would indicate that the second device does not support a protocol of the network service request. Taylor further teaches that the translator “enables a robust communication link between devices where communication and the exchange of information is currently either very difficult or impossible.”

(Abstract) The translator allows the destination (end device) to communicate based on the protocol/service of the gateway.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

i) Regarding claims 1, 6, and 11, the claims are indefinite because it is unclear if the feature of “topology information” which is parenthesis is part of the claimed invention.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 6, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor, US Patent #6,785,730 (Taylor hereinafter), in view of Aggarwal, US Patent #5,675,741 (Aggarwal hereinafter) and Fukushima et al. US Patent #6,292,489 (Fukushima hereinafter).

Art Unit: 2154

11. As per claims 1, 6, and 11, Taylor teaches substantially the invention as claimed including a method, and computer-readable storage medium, where at least one first device which responds to a network service request transmitted by a user in a protocol associated with the first device and at least one second device which does not support the protocol of the network service request are connected and said second device having a setting of which can be modified from outside said second device, Taylor's teachings comprising:

a network information collecting section for obtaining information about a network service provided by the first device, responsive to the network service request, by communicating with said first device (col. 6, lines 2-5; col. 8, lines 23-34. Receive incoming message from a source and determine source protocol type. col. 8, line 64-col. 9, line 10. Protocols supported by translator. col. 5, lines 7-11. Sources may be gateway, Internet, intranet.);

a setting device determining section for specifying the second device which does not support the protocol of the network service request based on information from the network information collecting section (col. 6, lines 14-15; col. 13, lines 6-9. Determine target device. col. 2, line 45-50; col. 3, lines 28-30. Devices having differing data formats and different protocols. col. 7, lines 51-53. Transmit message to the destination device.);

a service mapping section for mapping network service parameters for setting routing information to be set into parameter values corresponding to the second device specified by the setting device determining section (col. 7, lines 30-32. Categorizes and translates message into destination format. col. 7, lines 51-53. Transmit message to the destination device.); and

a service setting section for communicating with the second device and setting the parameter values obtained by the service mapping section in the second device (col. 6, lines 31-33; col. 7, lines 51-52; col. 13, lines 45-46. Sends converted message to target device.),

thereby said service allocating device responds to the network service request by controlling the parameter values of the second device allowing the second device to provide network service corresponding to the network service provided by the first device, according to the service requested by the first device (col. 7, lines 30-32. Translates messages between devices. col. 3, lines 14-23. Allow devices and applications to interoperate.).

12. Taylor does not specifically teach of calculating an IP route for providing the network to the user based on information from the network information from the network information collecting section, wherein the IP route is from an IP source address (SA) to an IP destination address (DA) and the IP route is calculated from a pair of the SA and DA, a relay router that constitutes an IP network, a connection relation of the relay router (topology information), and routing information. Taylor also does not specifically teach of setting priority-based control to be set into parameter values.

Aggarwal teaches of a network device that calculates an IP route based on information from the network information collecting section, wherein the IP route is from an IP source address (SA) to an IP destination address (DA) and the IP route is calculated from a pair of the SA and DA, a relay router that constitutes an IP network, a connection relation of the relay router (topology information), and routing information (col. 2, lines 29-42. Determine path by compiling list of next-hop routers on the path between source IP address and the destination IP address.).

13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Taylor and Aggarwal for the service allocating device as taught by Taylor to calculates an IP route based on information from the network information collecting section, wherein the IP route is from an IP source address (SA) to an IP destination address (DA) and the IP route is calculated from a pair of the SA and DA, a relay router that constitutes an IP network, a connection relation of the relay router (topology information), and routing information. The motivation for the suggested

Art Unit: 2154

combination is that Aggarwal's teachings would allow the service allocating device of Taylor to determine a path to efficiently transmit data to a destination.

14. Taylor and Aggarwal still do not specifically teach of setting priority-based control to be set into parameter values.

Fukushima teaches of setting traffic control parameters in network devices, the traffic control parameters including priority (Abstract; col. 6, lines 32-40; col. 10, lines 39-49).

15. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the suggested system of Taylor and Aggarwal with the teachings of Fukushima to set traffic control parameters including priority in network devices such as the destination device. The motivation for the suggested combination is that Fukushima's teachings would assure communication quality of each connection (col. 2, lines 7-11).

16. Claims 2, 5, 7, 10, 12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor, Aggarwal, and Fukushima, in view of Bertin et al, US Patent #5,687,167 (Bertin hereinafter).

17. As per claim 2, 7, and 12, Taylor teaches the service allocating device according to claim 1, further comprising: a service setting storing section storing setting contents of the first and second devices which respond to previous network services (col. 6, lines 2-5, 22-32. Recognition of protocols and application types of devices. col. 9, lines 10-16. Determine source and destination protocol.). However, Taylor does not specifically teach a service competition calculating section in checking a competition relation between network service requests from a plurality of users based on information stored in the service setting storing section, adjusting the competition relation, and a determining the setting contents of the first and second devices so as to respond to the network service to be provided.

Art Unit: 2154

Bertin teaches of a service allocating system for storing priority information for network services (col. 2, line 44-53; Col 14, lines 24-33); checking relation between network service requests from a plurality of users based on stored information; adjusting the priorities of users; and determining the setting contents to respond to the network service to provided (col. 13, line 64–col. 14, line 37; col. 17, lines 15-25).

18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the suggested system of Taylor, Aggarwal, and Fukushima with the teachings of Bertin to store priority information for network services; check relationship between network service requests from a plurality of users based on stored information; adjust the priorities of users; and determine the setting contents to respond to the network service to provided. The motivation for the suggested combination is that Bertin's teachings would provide efficient management of traffic by dynamically changing connection settings to allow connections with high priority level.

19. As per claims 5, 10, and 15, Taylor does not teach of the service allocating device according to claim 2, further comprising: a service stoppage request generating section obtaining information about a network service provision state of the first device, detecting provision stoppage of a network service by the first device based on the network service provision state information, and generating a service stoppage request, a service setting storing section storing a plurality of setting information to the first and second devices, which correspond to a network service that existed before provision stoppage of the network service is detected, and a service competition calculating section calculating a service competition relation that is modified by the detected provisional stoppage of the network service according to both the service stoppage request and storage information of the service setting storing section.

Art Unit: 2154

Bertin teaches of a service allocating system that stores the setting information for user connections and calculate a service competition relation based on storage information (modify services based on priorities and bandwidth) (col. 13, lines 30-47; col. 14, lines 1-37).

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the suggested system of Taylor, Aggarwal, and Fukushima with the teachings of Bertin to store the setting information for user connections and calculate a service competition relation. The motivation for the suggested combination is that Bertin's teachings would allow adjusting network services to service users based changing conditions in the network and on user requests.

Bertin does not specifically teach of detecting provision stoppage of a network service by the first device based on the network service provision state information, and calculating a service competition relation that is modified by the detected provisional stoppage of the network service according to both the service stoppage request. However, Bertin teaches of terminating connections and reallocating resources to other users. Therefore, it would have been obvious to one of ordinary skill in the art to modify the system to detect the stoppage of network service and determine service competition based on the stoppage request, which would allow a node to release the reservation of resources that was held for the network service, i.e. reallocate resources, and use the resources for other nodes or devices requesting network services.

21. Claims 3, 4, 8, 9, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor, Aggarwal, and Fukushima, in view of Ricciulli, US Patent #6,275,470 (Ricciulli hereinafter).

22. As per claims 3, 8, and 13, Taylor does not specifically teach the service allocating device according to claim 1 further comprising: a priority route selecting section selecting a device for providing a higher function of a requested network service, of the first and second devices which are connected to

Art Unit: 2154

the network, and determining a communications route through which the selected device is connected; and a route comparison section comparing a communications used prior to a new network service request with a communications route determined by the priority route selecting section.

Ricciulli teaches a system for selecting devices for providing alternate route through the network nodes; determining a communications route for servicing the request; and comparing a previously used route with the newly selected route to determine if the new route provides better performance (col. 4, lines 16-53).

23. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the suggested system of Taylor, Aggarwal, and Fukushima with the teachings of Ricciulli to select devices for providing alternate route through the network nodes; determine a communications route for servicing the request; and compare a previously used route with the newly selected route to determine if the new route provides better performance. The motivation for the suggested combination is that Ricciulli's teachings would improve network communication by identifying paths that provide better performance (col. 4, lines 38-43).

24. As per claims 4, 9, and 14, Taylor does not teach the service allocating device according to claim 3, further comprising a route setting generating section determining a communications route suitable for provision of the new network service based on a comparison result obtained by the route comparison section, which performs control so that the new network service can be provided, using a communications route determined by the route setting generating section.

Ricciulli teaches a system for determining route suitable for provision of the new network service based on comparison results and using the determined communications route so that the new network service can be provided (col. 4 lines 38-52).

Art Unit: 2154

25. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the suggested system of Taylor, Aggarwal, and Fukushima with the teachings of Ricciulli to determine a route suitable for provision of the new network service based on comparison results and using the determined communications route so that the new network service can be provided. The motivation for the suggested combination is that Ricciulli's teachings would improve network communication by identifying paths that provide better performance (col. 4, lines 38-43).

Conclusion

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

27. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Friday 7 to 4.

Art Unit: 2154

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

NATHAN FLYNN
SUPERVISORY PATENT EXAMINER

30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 9, 2007

JJ